

Appl. No. 10/802,339

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Reply to Office action of October 19, 2005

**REMARKS**

Claims 1-9, 11-18, 32 and 33 remain pending in the above-identified application and have been rejected. Claims 13 and 33 have been amended. Claims 19-21, 34 and 35 have been canceled solely to further the prosecution of the above-identified application.

Claims 13, 14 and 33 have been objected to. The Office action states that claim 13 should depend from claim 1 instead of canceled claim 10 and claim 33 should depend from claim 32 instead of claim 1. Applicant has amended claim 13 to depend from claim 1 and 33 to depend from claim 32. Reconsideration and allowance of these claims is requested.

Claims 1, 5, 6, 13 and 32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Chen. Applicant respectfully traverses the rejection.

Claim 1, from which claims 5, 6, 13 and 32 depend, recites a thermistor probe assembly that includes, among other things, "a thermistor element", "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" and "a moisture proof shield disposed to cover the thermistor element and the positioning device, wherein the moisture proof shield comprises a surface energy enhancing material."

As the Office action points out, Chen discloses a thermistor element, a positioning device and a moisture proof shield. The Office action further states that the moisture proof shield of Chen is disposed to cover the element and the positioning device. Applicant respectfully counters that Chen does not show such an arrangement. Instead, Chen shows the epoxy 23 surrounding the sensor 24 and within and over a portion of the tubular metal sleeve 30. Chen fails to teach or suggest that the epoxy 23 covers, as in encapsulates, the tubular metal sleeve 30.

Furthermore, applicant submits that Chen also fails to teach or suggest "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1. The positioning device of Chen, namely the tubular metal sleeve 30, does not, and frankly cannot, position the thermistor element at a pre-determined location within the assembly. To the contrary, and with specific reference to FIG. 3 of Chen, the tubular metal sleeve 30 is positioned above the sensor 24 and, absent the epoxy 23 the sensor 24 can move about freely below the bottom

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33 of the tubular metal sleeve 30. Since the sensor 24 of Chen can move about freely beneath the tubular metal sleeve 30, applicant submits that Chen's positioning device does not serve to position the thermistor element at a pre-determined location within the assembly. Therefore, the tubular metal sleeve 30 of Chen does not position "the thermistor element at a pre-determined location within the assembly" as recited in claim 1.

Claims 1-3, 5-7, 9, 11, 13, 14, 16 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0146819 (hereinafter "Shibayama") in view of Chen. Applicant respectfully traverses the rejection.

As noted above, claim 1 recites a thermistor probe assembly that includes, among other things, "a thermistor element", "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" and "a moisture proof shield disposed to cover the thermistor element and the positioning device, wherein the moisture proof shield comprises a surface energy enhancing material."

Chen fails to teach or suggest "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1. As noted above, the tubular metal sleeve 30 of Chen cannot position the thermistor element at a pre-determined location within the assembly. Instead, the tubular metal sleeve 30 of Chen is positioned above the sensor 24 and, absent the epoxy 23 the sensor 24 can move about freely below the bottom 33 of the tubular metal sleeve 30. Since the sensor 24 of Chen can move about freely beneath the tubular metal sleeve 30, applicant submits that Chen's positioning device does not serve to position the thermistor element at a pre-determined location within the assembly. The Office action states that Shibayama does not disclose an assembly that has a positioning device for positioning the thermistor element at a pre-determined central location within the assembly, and therefore Shibayama adds no relevant teaching to Chen as regarding "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Nimberger. Claim 8 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Krohn. Claim 12 stands rejected under 35

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U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Edwards and the prior art disclosed by applicant on page 4, lines 1-5 of the specification. Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Fukaya. Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Betzner. Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shibayama and Chen in further view of Kurano.

Claims 4, 8, 12, 15, 17 and 18 all depend from claim 1. As described above, neither of the primary references Shibayama or Chen, either alone or in combination, teach or suggest "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1.

Nimberger is relied upon in the Office action as disclosing a thermistor probe assembly with a thermistor and lead wires connected to the thermistor and to conductor material for obtaining temperature measurements from the thermistor. Krohn is relied upon in the Office action as disclosing a thermostatic probe assembly having conductor material made of brass. Edwards is relied upon in the Office action as disclosing a temperature probe having a thermistor at a tip of the probe, and the prior art disclosed by applicant in the specification is directed to specific types of loctites. Fukaya is relied upon in the Office action as disclosing a thermistor probe assembly that has a molding material that is compatible with the insulating material, the conductor material is welded to the lead wires, and the lead wires include steel. Betzner is relied upon in the Office action as disclosing the soldering of lead wires of a thermistor of a probe assembly to a conductor material. Kurano is relied upon in the Office action as disclosing a thermistor probe assembly having lead wires made of copper.

Applicant submits that Nimberger, Krohn, Edwards, applicant's prior art, Fukaya, Betzner, and Kurano fail to add any substantive teaching or suggestion to either Shibayama or Chen regarding "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1.

Claims 19-21, 34 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chen in view of Shibayama. Applicant has canceled claims 19-21, 34 and 35, thus rendering

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this rejection moot.

Claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Chen in view of Shibayama. Applicant respectfully traverses the rejection.

Claim 33 is now dependent upon claim 32, and ultimately upon claim 1. As noted above, Chen and Shibayama, either alone or in combination, fail to teach or suggest "a positioning device for positioning the thermistor element at a pre-determined location within the assembly" as recited in claim 1. Further, claim 32 recites "at least three self-centering lobes adapted to position the thermistor element within the thermistor probe assembly". The lugs 32 of Chen and the ribs 200 of Shibayama are not adapted to position the thermistor element within the thermistor probe assembly. Instead, the lugs 32 and the ribs 200 are adapted to position, respectively, the tubular measuring end 21 against the tubular metal sleeve 30 (column 2, lines 51-55, Chen) and the insulating case 50 within the resin mold 90 (FIGS. 1 and 7A, Shibayama).

Finally, applicant respectfully requests that the finality of the Office action dated October 19, 2005 be removed. The new grounds of rejection were not brought about by any action of the applicant, and thus, applicant should not be penalized with a final rejection. Specifically, in the Office action dated June 22, 2005, claims 11 and 12 were held to be allowable if rewritten in independent form including all the limitations of the base and any intervening claims. Claim 1 was rewritten to incorporate all the limitations of claim 10 and some, but not all, of the limitations of claim 11. Thus, the claim scope of claims 11 and 12 is unchanged. And yet, in the instant Office action, instead of claims 11 and 12 being allowed or at the very least still being held allowable, claims 11 and 12 have been rejected as unpatentable over various combinations of Chen and Shibayama, references cited by the Examiner in the previous Office action against other claims.

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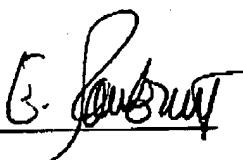
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In view of the remarks and amendments set forth above, applicant respectfully requests allowance of the pending claims. If the Examiner has any questions regarding the present patent application, the Examiner can call Applicant's attorney, William Powell, at telephone number (518)-387-4530.

Respectfully submitted,

By 

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